DT-6XXX, DT-7000

EMBEDDED NETWORK PROCESSOR PLATFORM

DT6BACKUP / DT6RELOAD /DT6UPGRADE

DT7BACKUP / DT7RELOAD

USER'S MANUAL / RELEASE NOTES

RELEASE.VERSION 3.0

ISSUE 1

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TABLE of CONTENTS

Introduction 5
1.1 Mechanizing Backup and Retrieve 5
1.2 Bypassing FTP and Executing Upgrades From a Remote Server 5
1.3 Support Hosts 5
1.4 Obtaining the Utilities 6
2 Product Features 6
3 Release Changes 7
3.1 Release 3.0 7
3.2 Release 2.0 7
3.3 Release 1.0 7
4 Application Command Syntax 8
4.1 DT6backup 8
4.1.1 Usage for TCP/IP Endpoints 8
4.1.2 Usage for BNS Endpoints (CommKit/IP-CommKit Connected Support Host Platform) 9
4.2 DT7backup 10
4.2.1 Usage for TCP/IP Endpoints 10
4.2.2 Usage for BNS Endpoints (CommKit/IP-CommKit Connected Support Host Platform) 11
4.3 DT6reload 12
4.3.1 Usage for TCP/IP Endpoints 12
4.3.2 Usage for BNS Endpoints (CommKit/IP-CommKit Connected Support Host Platform) 13
4.4 DT7reload 14
4.4.1 Usage for TCP/IP Endpoints 14
4.4.2 Usage for BNS Endpoints (CommKit/IP-CommKit Connected Support Host Platform) 15
4.5 DT6upgrade 16
4.5.1 Usage for TCP/IP Endpoints 16
4.5.2 Usage for BNS Endpoints (CommKit/IP-CommKit Connected Support Host Platform) 17
5 Notes on Application Operation 18
6 Installation Addendum 19
6.1 Obtaining Information from Datatek Applications Inc. 19
6.2 Installing the Utilities 19
6.3 Caveats 19
7 Documentation 19
8 End-User License Agreement for Software 20
8.1 Software License 20
8.2 Intellectual property Rights 20
8.3 Software Support 20

8.4 Export Restrictions 21
8.5 Limited Warranty 21
8.6 No Other Warranties 21
8.7 Special Provisions 21
8.8 Limitation of Liability 22

INTRODUCTION

A set of host-based utilities are offered to assist in management of the DT-6x6x family and the DT-7000.

1.1 MECHANIZING BACKUP AND RETRIEVE

This set of utilities allows the mechanization of the backup and retrieve/reload processes. They are called **DT6backup** and **DT6reload** respectively for the DT-6061, DT-6160, and DT-6260 family of products (DT-6XXX) and **DT7backup** and **DT7reload** for the DT-7000.

The backup and reload utilities use the **back** and **retrieve** commands respectively, and hence can be used also with any release of DT-6XXX or DT-7000 platform software.

1.2 BYPASSING FTP AND EXECUTING UPGRADES FROM A REMOTE SERVER

The new *server active* option **(-sa)** in this set of utilities allows the backup and retrieve/reload processes to be executed *without an FTP connection* from the DT-6XXX or DT-7000 to the server. In addition, a new utility, **DT6upgrade**, allows installing new software on the DT-6X6X products. The **–sa** option must be used when running **DT6upgrade**. These features require the DT-6XXX, to be running one of these releases or higher of the platform software:

Product	Release
DT-6061	Build 17.1
DT-6160, DT-6260	Build 2.1

Table 1: Minimum Platform Software Level

These capabilities are not available yet for DT-7000.

1.3 SUPPORT HOSTS

The **DT6backup, DT6reload, DT7backup, DT7reload,** and **DT6upgrade** utilities run on a support host with the UNIX®-based HP-UX® or Solaris® operating systems (OS). These programs connect to DT-6061, DT-6160, DT-6260, and DT-7000 serial consoles through either:

1. A BNS/Datakit ®II VCS network where the serial console port of a product is connected to an asynchronous port such as a TY12, SAM, or DT-4000 used as a SAM. The support host is connected to the BNS/Datakit network via CommKit or IP-CommKit™ Host Interface software.

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2. An IP network to a DT-4XXX device where the serial console port of a product is connected.
3. An IP network directly to the telnet console of the DT-6061/DT-6160/DT-6260 platform[1] or the DT-7000 telnet console.

1.4 OBTAINING THE UTILITIES

In order to obtain the utilities, a user contacts Datatek who will send the utility via email. The user then copies or FTP's the utilities to the support host.

Note that these **DT6backup, DT6reload, DT6upgrade, DT7backup,** and **DT7reload** utilities *cannot* be used in place of the **DTupgrade**, **DTbackup**, or **DTreload** utilities that are matched to the DT-4XXX, IP-DSU, etc. products.

2 PRODUCT FEATURES

These utilities execute on the HP-UX or Solaris support host and perform the backup (**back)** and reload/retrieve (**retr)** functions via the console connections to:

- DT-6061
- DT-6160
- DT-6260
- DT-7000

The **DT6backup, DT6reload, DT7backup,** and **DT7reload** utilities use the existing platform software of the listed products to perform the **back** and **retrieve (retr)** commands. The utilities work by connecting to and logging into a unit console and driving the console interface through command sequences while monitoring the console responses. The **back** and **retr** commands in turn connect by FTP (unless the server active option **(-sa)** is invoked) from the unit to a server to upload or download the database of the unit, just as they would if a person were interacting directly with the unit console. Hence, the backup/reload process can be automated by embedding the dt6backup and dt6reload or dt7reload command lines into scripts, which then can be scheduled via a UNIX cron function to run automatically.

In addition, the new option, *server active* **(-sa)**, coupled with the minimum level or higher of the platform software (see Table 1: Minimum Platform Software Level), allows the backup and retrieve functions to be performed *without an FTP connection*. The new **DT6upgrade** utility, coupled with minimum level or higher of the platform software, allows installing new software onto the DT-6x6x family *without an FTP connection*. (A utility that performs upgrade for the DT-7000 product will be delivered with a future DT-7000 platform update.)

[1] A telnet console for the *platform* of the DT-6061 was added in release 17.0 and for the DT-6160/6260 in release 2.0.

The advantages of using these utilities are:

- The DT-6XXX/DT-7000 administrator can write a simple script with an easily remembered name containing the command lines calling the backup utilities and schedule the script to run periodically. That way the backups (and/or reloads) can be executed when system activity is not high. Also the administrator does not have to remember to run the script.
- The administrator does not have to manually log into each DT device, which can consume much time and is prone to typing errors etc., nor does the administrator have to remember the individual passwords for each DT device or the order and delimitation flags for the parameters on the command lines.
- Using the new server active option **(-sa)** with the minimum level or higher of the platform software allows backup, retrieve, and software upgrade for DT-6X6X products directly from the host *without an FTP server*.

3 RELEASE CHANGES

3.1 RELEASE 3.0

- The new server active option **(-sa)** removes the requirement for a host FTP server.
- The ability to perform software upgrades (**DT6upgrade**) from a remote server is added for the DT-6x6x series of the products.
- These utilities run on either servers running HP-UX or Solaris operating systems. The capability to run on a Solaris server was added in this release.

Release 17.1 or higher of the DT-6061 platform software or release 2.1 or higher of the DT-6160 platform software is required and must be previously installed on the respective platforms in order to use the **–sa** option or **dt6upgrade** utility

3.2 RELEASE 2.0

There was no release 2.0 deployed to customers. This release was for interim, internal use only.

3.3 RELEASE 1.0

This is the initial release of the DT6utilities. These utilities cannot be used with any other Datatek products except the DT-6X6X and DT-7000 products. These utilities do not require the administrator to manually log onto each platform to perform the functions. Instead the utilities can be executed on a remote server platform which incorporates logging onto the individual platforms remotely. These capabilities allow scripts to be written and executed periodically from a remote server.

4 APPLICATION COMMAND SYNTAX

The **DT6backup, DT6reload, DT7backup,** and **DT7reload** commands have similar command parameters to those used for the **DTbackup** and **DTreload** utilities, with variations accounting for the connection method (TCP or BNS) and another variation due to the fact that the **retr** command on some units requires parameters. Also, the **back** and **retr** commands on the unit require the name of an FTP server and a login and password on the server. Alternatively, the **–sa** parameter may be given, which invokes a new communication interface that bypasses **back** and **retr**.

4.1 DT6BACKUP

4.1.1 USAGE FOR TCP/IP ENDPOINTS

```
Syntax: <dt6backup> –i [-v] [-d] [-V] [–p<pass>] [-P] [–t<TCP#>]
                       -sa | -sp<pass> | -sP
                       [–sn<server>] [–sl<login>]
                       <IP-ADDR> <filename>
```

Where:

-v	Print Version of the Utility, then exit
-d	Connection Debug (verbose) print enable
-V	Abbreviated Debug (verbose) showing runtime progress of the utility
-p<pass>	Password for logging into the DT product (Default is “initial”)
-P	As an alternative to supplying the –p<pass> option, -P causes **dt6backup** to prompt for the unit password when it is needed. The password is not echoed.
-i	Specifies that a TCP/IP connection is to be used
-t<TCP#>	Overrides the standard TCP/IP Port number (Default is 1023)
-sa	Allows direct file transfer to the host. This requires the minimum level or higher of the platform software. If this option is used, none of the other **–s** options is needed.
-sn<server>	Name or IP address of the FTP server to receive the backup file. If this is not supplied, the server running the utility is used as the FTP server.
-sl<login>	The login on the FTP server to receive the backup file. If this is not supplied, the user running the utility is used as the login for FTP.
-sp<pass>	The password for the login on the FTP server to receive the backup file
-sP	As an alternative to using the –sp<pass> option, -sP causes **dt6backup** to prompt for the FTP server password when it is needed. The password is not echoed.
<IP-ADDR>	The IP address of the DT product console
<filename>	The target filename on the server including its directory string, if necessary.

One of the following options: the **–sa** option, the **–sp<pass>** option or the **–sP** option ***must*** be given in the command line. If one of the latter two options is chosen, the password for logging into the FTP server that receives the backup file is either specified on the command line or prompted with *echo* off.

4.1.2 USAGE FOR BNS ENDPOINTS (COMMKIT/IP-COMMKIT CONNECTED SUPPORT HOST PLATFORM)

```
Syntax: <dt6backup> [-v] [-d] [-V] [–p<pass>] [-P]
                    -sa | -sp<pass> | -sP
                    <sn<server>] [–sl<login>]
                    <DialString> <filename>
```

Where:

-v	Print Version of the Utility, then exit
-d	Connection Debug (verbose) print enable
-V	Abbreviated Debug (verbose) showing runtime progress of the utility
-p<pass>	Password for logging into the DT product (Default is “initial”)
-P	As an alternative to supplying the –p<pass> option, -P causes **dt6backup** to prompt for the unit password when it is needed. The password is not echoed.
-sa	Allows direct file transfer to the host. This requires the minimum level or higher of the platform software. If this option is used, none of the other **–s** options is needed.
-sn<server>	Name or IP address of the FTP server to receive the backup file. If this is not supplied, the server running the utility is used as the FTP server.
-sl<login>	The login on the FTP server to receive the backup file. If this is not supplied, the user running the utility is used as the login for FTP.
-sp<pass>	The password for the login on the FTP server to receive the backup file
-sP	As an alternative to using the –sp<pass> option, -sP causes **dt6backup** to prompt for the server password when it is needed. The password is not echoed.
<DialString>	The BNS dialstring of the DT product console
<filename>	The target filename on the server including its directory string, if necessary.

One of the following options: the **–sa** option, the **–sp<pass>** option or the **–sP** option ***must*** be given in the command line. If one of the latter two options is chosen, the password for logging into the FTP server that receives the backup file is either specified on the command line or prompted with *echo* off.

4.2 DT7BACKUP

4.2.1 USAGE FOR TCP/IP ENDPOINTS

Syntax: <dt7backup> –i [-v] [-d] [-V] [–p<pass>] [-P] [–t<TCP#>]
-sp<pass> | -sP
[–sn<server>] [–sl<login>]
<IP-ADDR> <filename>

Where:

-v	Print Version of the Utility, then exit
-d	Connection Debug (verbose) print enable
-V	Abbreviated Debug (verbose) showing runtime progress of the utility
-p<pass>	Password for logging into the DT product (Default is “initial”)
-P	As an alternative to supplying the –p<pass> option, -P causes **dt7backup** to prompt for the unit password when it is needed. The password is not echoed.
-i	Specifies that a TCP/IP connection is to be used
-t<TCP#>	Overrides the standard TCP/IP Port number (Default is 1023)
-sa	This option is not available yet for **DT7backup**.
-sn<server>	Name or IP address of the FTP server to receive the backup file. If this is not supplied, the server running the utility is used as the FTP server.
-sl<login>	The login on the FTP server to receive the backup file. If this is not supplied, the user running the utility is used as the login for FTP.
-sp<pass>	The password for the login on the FTP server to receive the backup file
-sP	As an alternative to using the –sp<pass> option, -sP causes **dt7backup** to prompt for the FTP server password when it is needed. The password is not echoed.
<IP-ADDR>	The IP address of the DT product console
<filename>	The target filename on the FTP server including its directory string, if necessary.

One of the following options: the **–sp<pass>** option or the **–sP** option ***must*** be given in the command line. The password for logging into the FTP server that receives the backup file is either specified on the command line or prompted with *echo* off.

4.2.2 USAGE FOR BNS ENDPOINTS (COMMKIT/IP-COMMKIT CONNECTED SUPPORT HOST PLATFORM)

Syntax: <dt7backup> [-v] [-d] [-V] [–p<pass>] [-P]
-sp<pass> | -sP
<sn<server>] [–sl<login>]
<DialString> <filename>

Where:

-v	Print Version of the Utility, then exit
-d	Connection Debug (verbose) print enable
-V	Abbreviated Debug (verbose) showing runtime progress of the utility
-p<pass>	Password for logging into the DT product (Default is “initial”)
-P	As an alternative to supplying the –p<pass> option, -P causes **dt7backup** to prompt for the unit password when it is needed. The password is not echoed.
-sa	This option is not available yet for **DT7backup**.
-sn<server>	Name or IP address of the FTP server to receive the backup file. If this is not supplied, the server running the utility is used as the FTP server.
-sl<login>	The login on the FTP server to receive the backup file. If this is not supplied, the user running the utility is used as the login for FTP.
-sp<pass>	The password for the login on the FTP server to receive the backup file
-sP	As an alternative to using the –sp<pass> option, -sP causes **dt7backup** to prompt for the server password when it is needed. The password is not echoed.
<DialString>	The BNS dialstring of the DT product console
<filename>	The target filename on the FTP server including its directory string, if necessary.

One of the following options: the **–sp<pass>** option or the **–sP** option ***must*** be given in the command line. The password for logging into the FTP server that receives the backup file is either specified on the command line or prompted with *echo* off.

4.3 DT6RELOAD

4.3.1 USAGE FOR TCP/IP ENDPOINTS

```
Syntax: dt6reload –i [-v] [-d] [-V] [–p<pass>] [-P] [–t<TCP#>]
                        -sa | -sp<pass> | -sP
                        [–sn<server>] [–sl<login>]
                        <IP-ADDR> <filename> <instances>
```

Where:

-v	Print Version of the Utility, then exit
-d	Connection Debug (verbose) print enable
-V	Abbreviated Debug (verbose) showing runtime progress of the utility
-p<pass>	Password for logging into the DT product (Default is “initial”)
-P	As an alternative to supplying the –p<pass> option, -P causes **dt6reload** to prompt for the unit password when it is needed. The password is not echoed.
-i	Specifies that a TCP/IP connection is to be used
-t<TCP#>	Overrides the standard TCP/IP Port number (Default is 1023)
-sa	Allows direct file transfer from the host to the unit. This requires the minimum level or higher of the platform software. If this option is used, none of the other **–s** options are needed.
-sn<server>	Name or IP address of the FTP server from which to retrieve the backup file. If this is not supplied, the server running the utility is used as the FTP server.
-sl<login>	The login on the FTP server from which to retrieve the backup file. If this is not supplied, the user running the utility is used as the login for FTP.
-sp<pass>	The password for the login on the FTP server from which to retrieve the backup file
-sP	As an alternative to using the –sp<pass> option, -sP causes **dt6reload** to prompt for the server password when it is needed. The password is not echoed.
<IP-ADDR>	The IP address of the DT product console
<filename>	The filename including its directory string, if necessary, on the server containing the backup information.
<instances>	Either **all** or a list of instance numbers, separated by blanks, for which configuration is to be retrieved.

One of the following options: the **–sa** option, the **–sp<pass>** option or the **–sP** option ***must*** be given in the command line. If one of the latter two options is chosen, the password for logging into the FTP server that retrieves the backup file is either specified on the command line or prompted with *echo* off.

4.3.2 USAGE FOR BNS ENDPOINTS (COMMKIT/IP-COMMKIT CONNECTED SUPPORT HOST PLATFORM)

```
Syntax: dt6reload [-v] [-d] [-V] [–p<pass>] [-P]
                  -sa | -sp<pass> | -sP
                  [–sn<server>] [–sl<login>]
                  <DialString> <filename> <instances>
```

Where:

-v	Print Version of the Utility, then exit
-d	Connection Debug (verbose) print enable
-V	Abbreviated Debug (verbose) showing runtime progress of the utility
-p<pass>	Password for logging into the DT product (Default is “initial”)
-P	As an alternative to supplying the –p<pass> option, -P causes **dt6reload** to prompt for the unit password when it is needed. The password is not echoed.
-sa	Allows direct file transfer from the host to the unit. This requires the minimum level or higher of the platform software. If this option is used, none of the other **–s** options are needed.
-sn<server>	Name or IP address of the FTP server from which to retrieve the backup file. If this is not supplied, the server running the utility is used as the FTP server.
-sl<login>	The login on the FTP server from which to retrieve the backup file. If this is not supplied, the user running the utility is used as the login for FTP.
-sp<pass>	The password for the login on the FTP server from which to retrieve the backup file
-sP	As an alternative to using the –sp<pass> option, -sP causes **dt6reload** to prompt for the server password when it is needed. The password is not echoed.
<DialString>	The BNS dialstring of the DT product console
<filename>	The filename including its directory string, if necessary, on the server containing the backup information.
<instances>	Either **all** or a list of instance numbers, separated by blanks, for which configuration is to be retrieved. For the DT-7000, do not supply this parameter.

One of the following options: the **–sa** option, the **–sp<pass>** option or the **–sP** option ***must*** be given in the command line. If one of the latter two options is chosen, the password for logging into the FTP server that retrieves the backup file is either specified on the command line or prompted with *echo* off.

4.4 DT7RELOAD

4.4.1 USAGE FOR TCP/IP ENDPOINTS

Syntax: dt7reload -i [-v] [-d] [-V] [–p<pass>] [-P] [–t<TCP#>]
[–sn<server>] [–sl<login>]
-sp<pass> | -sP
<IP-ADDR> <filename>

Where:

-v	Print Version of the Utility, then exit
-d	Connection Debug (verbose) print enable
-V	Abbreviated Debug (verbose) showing runtime progress of the utility
-p<pass>	Password for logging into the DT product (Default is “initial”)
-P	As an alternative to supplying the –p<pass> option, -P causes **dt7reload** to prompt for the unit password when it is needed. The password is not echoed.
-i	Specifies that a TCP/IP connection is to be used
-t<TCP#>	Overrides the standard TCP/IP Port number (Default is 1023)
-sn<server>	Name or IP address of the FTP server from which to retrieve the backup file. If this is not supplied, the server running the utility is used as the FTP server.
-sl<login>	The login on the FTP server from which to retrieve the backup file. If this is not supplied, the user running the utility is used as the login for FTP.
-sp<pass>	The password for the login on the FTP server from which to retrieve the backup file
-sP	As an alternative to using the –sp<pass> option, -sP causes **dt7reload** to prompt for the server password when it is needed. The password is not echoed.
<IP-ADDR>	The IP address of the DT product console
<filename>	The filename including its directory string, if necessary, on the FTP server containing the backup information.

One of the following options: the **–sp<pass>** option or the **–sP** option ***must*** be given in the command line. The password for logging into the FTP server that retrieves the backup file is either specified on the command line or prompted with *echo* off.

4.4.2 USAGE FOR BNS ENDPOINTS (COMMKIT/IP-COMMKIT CONNECTED SUPPORT HOST PLATFORM)

```
Syntax: dt7reload [-v] [-d] [-V] [–p<pass>] [-P]
                  [–sn<server>] [–sl<login>]
                  -sp<pass> | -sP
                  <DialString> <filename>
```

Where:

-v	Print Version of the Utility, then exit
-d	Connection Debug (verbose) print enable
-V	Abbreviated Debug (verbose) showing runtime progress of the utility
-p<pass>	Password for logging into the DT product (Default is “initial”)
-P	As an alternative to supplying the –p<pass> option, -P causes **dt7reload** to prompt for the unit password when it is needed. The password is not echoed.
-sn<server>	Name or IP address of the FTP server from which to retrieve the backup file. If this is not supplied, the server running the utility is used as the FTP server.
-sl<login>	The login on the FTP server from which to retrieve the backup file. If this is not supplied, the user running the utility is used as the login for FTP.
-sp<pass>	The password for the login on the FTP server from which to retrieve the backup file
-sP	As an alternative to using the –sp<pass> option, -sP causes **dt7reload** to prompt for the server password when it is needed. The password is not echoed.
<DialString>	The BNS dialstring of the DT product console
<filename>	The filename including its directory string, if necessary, on the FTP server containing the backup information.

One of the following options: the **–sp<pass>** option or the **–sP** option ***must*** be given in the command line. The password for logging into the FTP server that retrieves the backup file is either specified on the command line or prompted with *echo* off.

4.5 DT6UPGRADE

This utility requires the minimum level or higher of the platform software (see Table 1: Minimum Platform Software, page 5).

4.5.1 USAGE FOR TCP/IP ENDPOINTS

Syntax: dt6upgrade -i [-v] [-d] [-V] [–p<pass>] [-P] -sa
<IP-ADDR> [–t<TCP#>] <filename>

Where:

-v	Print Version of the Utility, then exit
-d	Connection Debug (verbose) print enable
-V	Abbreviated Debug (verbose) showing runtime progress of the utility
-p<pass>	Password for logging into the DT product (Default is “initial”)
-P	As an alternative to supplying the –p<pass> option, -P causes **dt6reload** to prompt for the unit password when it is needed. The password is not echoed.
-i	Specifies that a TCP/IP connection is to be used
-t<TCP#>	Override the standard TCP/IP Port number (Default is 1023)
-sa	(Required) Use direct file transfer from the host to the unit. This requires the minimum level or higher of the platform software.
<IP-ADDR>	The IP address of the DT product console
<filename>	The filename including its directory string, if necessary, on this host containing the new software package.

The **–sa** option ***must*** be given in the command line.

4.5.2 USAGE FOR BNS ENDPOINTS (COMMKIT/IP-COMMKIT CONNECTED SUPPORT HOST PLATFORM)

Syntax: dt6upgrade [-v] [-d] [-V] [–p<pass>] [-P] -sa
<DialString> <filename>

Where:

-v	Print Version of the Utility, then exit
-d	Connection Debug (verbose) print enable
-V	Abbreviated Debug (verbose) showing runtime progress of the utility
-p<pass>	Password for logging into the DT product (Default is “initial”)
-P	As an alternative to supplying the –p<pass> option, -P causes **dt6reload** to prompt for the unit password when it is needed. The password is not echoed.
-sa	(Required) Uses direct file transfer from the host to the unit. This requires the minimum level or higher of the platform software.
<DialString>	The BNS dialstring of the DT product console
<filename>	The filename including its directory string, if necessary, on this host containing the new software package.

The **–sa** option ***must*** be given in the command line.

5 NOTES ON APPLICATION OPERATION

The <filename> parameter on the command line is normally associated with the current host. If the **–sa** option is not used, the <filename> parameter is associated with the FTP server. If the **–sn <name>** option is used and that server is different from the support host running one of these utilities, then the filename must be specified with a leading '/'. Otherwise, the filename can be augmented by the name of the current directory on the support host where the utility is run.

These utilities normally operate with minimal output. Syntax errors generate an error description and a usage summary. If any error is detected during operation, the complete transcript of the connection session with the unit is output followed by a description of the type of error detected. To obtain a minimal real time report of the stages of normal operation, the –V option may be used. To obtain a detailed debug transcript in real time, the –d option may be used. Otherwise, the only output is a single line report from the product that signifies the command completed successfully (multiple lines may be generated from **DT6upgrade**). All error messages and connection transcripts are sent to "standard error"; other output goes to "standard output".

These utilities may be interrupted by using the appropriate key sequence on the support host. The utilities forward the interrupt request to the unit (by sending ASCII DEL) and wait for the unit to terminate its operation. Then the utilities attempt to terminate the connection gracefully. Interrupting the utility a second time terminates the utility without waiting for the unit.

The **DT6backup** or **DT7backup** command is successful if the connection succeeds, login to the unit succeeds, the unit responds to the **back** command, no failure messages are detected, and the unit reports "Backup Complete" all within a reasonable time. If successful, the command exits with code '0', otherwise code '2' for utility syntax errors or '1' for runtime errors.

The **DT6reload** command is successful if the connection succeeds, login to the unit succeeds, the unit responds to the **retr** command, no failure messages are detected, and the unit reports "Retrieve complete" or "applications restarting" all within a reasonable time. Note that if no instance numbers given in the command line have been configured on the unit, the completion message will say "No applications restarting", but that is not considered an error. If successful, the command exits with code '0', otherwise code '2' for utility syntax errors or '1' for runtime errors.

The **DT7reload** command is successful if the connection succeeds, login to the unit succeeds, the unit responds to the **retr** command, no failure messages are detected, and the unit reports "Removing current configuration" and "Stopping bicon" all within a reasonable time. No "instance" parameters should be supplied, since the DT-7000 unit does not have instances. If successful, the command exits with code '0', otherwise code '2' for utility syntax errors or '1' for runtime errors.

The **DT6upgrade** command is successful if the connection succeeds, login to the unit succeeds, the unit responds to the internal command that initiates software upgrade, no failure messages are detected, the unit reports the "Sum" of the downloaded file, and the unit reports install is successful.

These utilities depend on the support host **telnet** or **dkcu** command, according to the command line options given. Those commands must be executable (in the user's **PATH**) for connections to be made to unit consoles.

6 INSTALLATION ADDENDUM

6.1 OBTAINING INFORMATION FROM DATATEK APPLICATIONS INC.

Load modules for all the Datatek migration products are obtained by sending email to either Bill Arndt at ***arndt@datatekcorp,com*** or Dan Conklin at ***conklin@datatekcorp.com*****.** All other documentation, including release notes, user manuals, "white-papers", etc. can be accessed on the Datatek web site and downloaded for your use.

6.2 INSTALLING THE UTILITIES

To insure that the correct version of the binary load module has been retrieved and has not been corrupted during the transmission process, the UNIX **sum** command can be used. (On some hosts, the "-s" flag must be used with the **sum** command.) After transmitting the file to the host machine from the PC to which the load module was initially sent from Datatek, on the host machine,

Key-in: **sum** < name of load module file>.

The value returned must match the number shown below:

Key-in**: sum dt6utils.hpux.3.0 or sum dt6utils.solaris.3.0**
Response: **7267 113 dt6utils.hpux.3.0 or 15104 88 dt6utils.solaris.3.0**
.
After moving the utility image to the host platform and verifying the checksum, before executing the utilities, the user must remove any filename extensions (mv <utility name>. <operating system >. <build number> <utility name>) and make the file executable (chmod +x <utility name> or chmod 0555 <utility name>.

For example:

mv dt6utils.hpux.3.0 dt6backup or mv dt6utils.solaris.3.0 dt6backup
chmod 555 dt6backup

The six utilities are embedded in a single image file. After creating the **dt6backup** image, link the **dt6reload, dt7backup, dt7reload, dt6upgrade,** and **dt7upgrade** (not available yet) images to **dt6backup**, as shown:

ln dt6backup dt6reload
ln dt6backup dt7backup
ln dt6backup dt7reload
ln dt6backup dt6upgrade

6.3 CAVEATS

- None

7 DOCUMENTATION

This combination user manual / release notes is the only documentation for these applications. It is available for download from the Datatek web site at URL:

http://www.datatekcorp.com/pdf/rn-DT6-7utils.pdf

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